

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. (Currently Amended) A device for controlling fluid using surface tension of the fluid, comprising:

at least one storage chamber to which a fluid is injected and stored;

at least one reaction chamber in which a predetermined reaction ~~is occurred~~
~~to occurs on the fluid;~~

at least one exhaust chamber in which the used fluid is exhausted;

at least one side connecting channel which connects at least two stop valves; ~~said storage chamber, reaction chamber, and exhaust chamber so that the fluid is removable~~ wherein the stop valves stop the flow of the fluid using the surface tension of the fluid;

at least one flow delay part which is formed within said connecting channel and delays flow of the fluid by the surface tension of the fluid; and

~~at least one stop valve which is formed within said connecting channel and stops the flow of the fluid by the surface tension,~~

wherein said fluid moves from said storage chamber to said reaction chamber and exhaust chamber by means of the surface tension while exchange of the fluid naturally occurs in said reaction chamber.

2. (Currently Amended) The device as claimed in claim 1, wherein said at least one storage chamber includes a fluid inlet ~~so that into which~~ the fluid can be injected

3. (Currently Amended) The device as claimed in claim 1, wherein said at least one side connecting channel adjusts the surface tension by increasing or decreasing a width of the path, or by performing surface modification or temperature change so that the fluid reliably moves.

4. (Currently Amended) The device as claimed in claim 1, wherein said at least one stop valve valves enables adjusts adjust the surface tension by having a hydrophilic or hydrophobic property through on a channel surface of the valve, deforming the channel geometry, or changing a temperature of the channel surface of the valve.

5. (Currently Amended) The device as claimed in claim 1, wherein said at least one flow delay part adjusts the surface tension by having a hydrophilic or hydrophobic property through on a channel surface of the valve, deforming the channel geometry, or changing a temperature of the channel surface of the valve.

6. (Original) The device as claimed in claim 1, wherein said at least one exhaust chamber includes a structure which keeps the flow of the fluid smooth by increasing the surface tension and makes the preceding portion of the fluid uniform when the fluid flows to prevent fine air bubbles from being occurred.

7. (Currently Amended) The device as claimed in claim 1, wherein said at least one side connecting channel includes an isolation threshold to prevent reactants among a plurality of said reaction chamber chambers from diffusing.

8. (Original) The device as claimed in claim 1, wherein said at least one reaction chamber has at least one electrode on the wall of the reaction chamber for optical and electrochemical detection.

9. (New) A device for controlling fluid using surface tension of the fluid, comprising:

at least two devices according to claim 1 connected in series.

10. (New) A device for controlling fluid using surface tension of the fluid, comprising:

at least two devices according to claim 1 connected in parallel.

11. (New) The device of claim 1, further comprising a filter.

12. (New) The device of claim 1, further comprising at least one sample preparation chamber.

13. (New) The device of claim 1, further comprising at least one air vent.

14. (New) A drug delivery device comprising the device of claim 1.

15. (New) A biochip comprising the device of claim 1.

16. (New) A micro biological/chemical reactor comprising the device of claim 1.

17. (New) A method of controlling fluid using surface tension comprising:

connecting a first fluid storage chamber with at least one reaction chamber, wherein the at least one reaction chamber is isolated from a second fluid storage chamber using a first stop valve;

connecting the reaction chamber with the first stop valve using a flow delay part;

cancelling the stopping barrier of the first stop valve by mixing a first fluid and a second fluid;

connecting the first stop valve with a second stop valve with a side connecting channel; and

cancelling the stopping barrier at the second stop valve by mixing a first fluid and a second fluid;

wherein the fluids flow using only capillary force.